

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A portrait image processing method comprising the steps of:
extracting a portrait image from an original image including a person and a background;
compositing the extracted portrait image and a background image prepared in advance to create a composite image;
detecting a boundary of the person and the background from the original image;
judging whether or not the detected boundary is a true contour of the person for each part of the boundary; and
applying correction processing for concealing a boundary part, which is judged not to be a true contour of the person, ~~to the boundary of the person and the background in the created composite image.~~
2. (Original) The portrait image processing method according to claim 1,
wherein said correction processing is image processing for overwriting another image on the boundary part which is judged not to be the true contour of the person.
3. (Original) The portrait image processing method according to claim 1,
wherein said correction processing is image processing for shifting the portrait image such that the boundary part, which is judged not to be the true contour of the person, is outside a frame of the composite image.
4. (Currently Amended) A portrait image processing apparatus comprising:
a portrait image extracting device which extracts a portrait image from an original image including a person and a background;
a background image recording device which stores a background image to be a background of a portrait image;

an image compositing device which composites the extracted portrait image and the background image read out from said background image recording device to create a composite image;

a boundary detecting device which detects a boundary of the person and the background from the original image;

a judging device which judges whether or not the detected boundary is a true contour of the person for each part of the boundary; and

an image correcting device which applies correction processing for concealing a boundary part, which is judged not to be a true contour of the person, to the boundary of the person and the background in the created composite image.

5. (Original) The portrait image processing apparatus according to claim 4, wherein said image correcting device performs image processing for overwriting another image on the boundary part which is judged not to be the true contour of the person.

6. (Original) The portrait image processing apparatus according to claim 4, wherein said image correcting device performs image processing for shifting the portrait image such that the boundary part, which is judged not to be the true contour of the person, is outside a frame of the composite image.

7. (New) A portrait image processing method, said method comprising:
extracting a portrait image from an original image including a person and a background;
compositing the extracted portrait image with a background image prepared in advance, to create a composite image;
detecting a boundary of the person in the original image;
identifying, in the detected boundary, a boundary part representing a contour of the person with low certainty; and
applying correction processing for concealing the boundary part in the created composite image.

8. (New) The portrait image processing method according to claim 7,
wherein said correction processing is image processing for overwriting the boundary part
with another image.
9. (New) The portrait image processing method according to claim 7,
wherein said correction processing is image processing for shifting the portrait image
such that the boundary part is outside a frame of the composite image.
10. (New) The portrait image processing method according to claim 1, wherein said
background is arbitrary.
11. (New) The portrait image processing method according to claim 1, wherein said
extracting step extracts facial parts from the original image, the facial parts including at least one
of eyes, nose and mouth.
12. (New) The portrait image processing method according to claim 1, wherein said step of
detecting a boundary uses an average positional relationship between a position of a facial part
and a boundary of a person and a background, to detect the boundary.
13. (New) The portrait image processing method according to claim 1, wherein said
extracting step
extracts a skin color in the original image,
sequentially applies area extension to connected areas, from a point of a skin color area,
extracts a face area based on a shape of a face, and
extracts a hair area above the face area, and/or a neck and chest area below the face area,
to extract the portrait image.

14. (New) The portrait image processing method according to claim 1, wherein said judging step determines whether a boundary part of the detected boundary is a boundary part with high certainty as a contour of the person, and/or whether or a boundary part of the detected boundary is a boundary part with low certainty as a contour of the person.

15. (New) The portrait image processing method according to claim 14, wherein a boundary part with low certainty is one of

a boundary part where a length between coordinate points on the boundary is partially larger than a decided value, due to unevenness of the boundary,

a boundary part which is out of a range of a reference contour line collected from contours of a large number of people, and

a boundary part for which a shape of the boundary part is different from a shape of a reference contour.

16. (New) The portrait image processing apparatus according to claim 4, wherein said background is arbitrary.

17. (New) The portrait image processing apparatus according to claim 4, wherein said portrait image extracting device extracts facial parts from the original image, the facial parts including at least one of eyes, nose and mouth.

18. (New) The portrait image processing apparatus according to claim 4, wherein said boundary detecting device uses an average positional relationship between a position of a facial part and a boundary of a person and a background, to detect the boundary.

19. (New) The portrait image processing apparatus according to claim 4, wherein said judging device determines whether a boundary part of the detected boundary is a boundary part with high certainty as a contour of the person, and/or whether or a boundary part of the detected boundary is a boundary part with low certainty as a contour of the person.

20. (New) The portrait image processing apparatus according to claim 19, wherein a boundary part with low certainty is one of

a boundary part where a length between coordinate points on the boundary is partially larger than a decided value, due to unevenness of the boundary,

a boundary part which is out of a range of a reference contour line collected from contours of a large number of people, and

a boundary part for which a shape of the boundary part is different from a shape of a reference contour.

21. (New) The portrait image processing method according to claim 1, wherein said extracting step is performed for extracting facial parts.

22. (New) The portrait image processing method according to claim 1, wherein said judging step determines whether a boundary part of the detected boundary is a boundary part with low certainty as a contour of the person, wherein a boundary part with low certainty corresponds to

a boundary part with a shape different from a shape of a reference contour, or

a boundary part where a length between coordinate points on the boundary is partially larger than a decided value due to unevenness of the boundary, or

a boundary part which is out of a range of a reference contour line.

23. (New) The portrait image processing apparatus according to claim 4, wherein said portrait image extracting device extracts facial parts.

24. (New) The portrait image processing apparatus according to claim 4, wherein said judging device determines whether a boundary part of the detected boundary is a boundary part with low certainty as a contour of the person, wherein a boundary part with low certainty corresponds to

a boundary part with a shape different from a shape of a reference contour, or

a boundary part where a length between coordinate points on the boundary is partially larger than a decided value due to unevenness of the boundary, or

a boundary part which is out of a range of a reference contour line.

25. (New) The portrait image processing method according to claim 7, wherein said extracting step is performed for extracting facial parts.

26. (New) The portrait image processing method according to claim 7, wherein a boundary part representing a contour of the person with low certainty corresponds to

a boundary part with a shape different from a shape of a reference contour, or

a boundary part where a length between coordinate points on the boundary is partially larger than a decided value due to unevenness of the boundary, or

a boundary part which is out of a range of a reference contour line.